

LISTING OF THE CLAIMS

Claim 1 (currently amended)

In an offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed ~~with a connector on the pipeline for making a connection~~ at said second position ~~for making a connection~~ to a subsea structure, and presenting a length (L) between the seabed and the laying vessel, a method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

- installing a first seabed transponder on the pipelay route centreline at the second position;

- installing a second seabed transponder on the pipeline route centerline spaced upstream from the first transponder at a distance (D') greater than (L);

- establishing the positions of the first and second seabed transponders so as to determine the exact distance separating said first and second seabed transponders;

- attaching a first pipe transponder on the pipeline and laying the pipeline at the first position so that it will land close to the second seabed transponder;

- interrogating the second seabed transponder and the first pipe transponder in a relative mode to establish the exact distance between them;

- comparing the established distance with the distance separating the first and second seabed transponders to calculate the remaining length of pipeline required to reach the second position;

- cutting the pipeline according to said remaining length;

- welding the connector to the pipeline; and thereby

- laying the pipeline to the second position with the connector being at the second position.

Claim 2 (currently amended)

The method of claim 1, wherein the distance (D') is comprised between (L + 300ft) and (L + 700ft).

Claim 3 (original)

The method of claim 1, wherein a third seabed transponder is arranged on the pipeline route upstream from the second seabed transponder.

Claim 4 (original)

The method of claim 3, wherein a second pipe transponder is attached to the pipeline upstream from the first pipeline transponder.

Claim 5 (original)

The method of claim 4, wherein the distance between the first and second pipe transponders is shorter than the distance between the second and third seabed transponders.

Claim 6 (currently amended)

The method of claim 4, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 7 (currently amended)

The method of claim 1, wherein a ~~third~~ another pipe transponder is attached ~~adjacent the connector~~ to the pipeline to help the positioning of the connector at the second position.

Claim 8 (original)

The method of claim 4, wherein said second and third seabed transponders are spaced about 500 feet apart.

Claim 9 (original)

The method of claim 8, wherein said first and second pipeline transponders are spaced about 300 feet apart.

Claim 10 (currently amended)

The method of claim 9, wherein the pipeline is laid so that the first and second pipe transponders are laid in between the second and third seabed transponders.

Claim 11 (currently amended)

In an offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, a method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing ~~a plurality of~~ first and second seabed transponders along the pipelay route, the first seabed transponder being near said second position;

determining the distance separating said first and second seabed transponders;

installing ~~at least one~~ a pipe transponder on said pipeline; and

interrogating said second seabed and pipe transponders, and said pipe transponder to determine the respective distance between them;

wherein the seabed transponders are arranged sufficiently near the pipelay route centreline so that the respective distances separating corresponding pairs of said second seabed and pipe transponders and said pipe transponder can be used to establish the remaining length of pipeline needed to reach the second position.

Claim 12 (original)

The method of claim 11, wherein the seabed transponders are arranged on the pipelay route centreline.

Claim 13 (new)

The method of claim 11, further comprising the steps of:

installing a third seabed transponder along the pipelay route;

installing a second pipe transponder on said pipeline near said first pipe transponder; and

interrogating said third seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.

Claim 14 (new)

The method of claim 4, wherein a third pipe transponder is attached to the pipeline to help the positioning of the connector at the second position.

Claim 15 (new)

In an offshore pipeline laying system, the pipeline being laid on the seabed by a surface laying vessel from a first position on the seabed to a second position on the seabed, a method for establishing the length of pipeline required to be provided from the vessel to reach the second position on the seabed, said method comprising the steps of:

installing a seabed transponder along the pipelay route;

installing a pipe transponder on said pipeline; and

interrogating said seabed transponder and said pipe transponder to determine the respective distance between them;

wherein the seabed transponder is arranged sufficiently near the pipelay route centreline so that the respective distance separating said seabed transponder and said pipe transponder can be used to establish the remaining length of pipeline needed to reach the second position on the seabed.

Claim 16 (new)

The method of claim 15, wherein the seabed transponder is arranged on the pipelay route centreline.

Claim 17 (new)

The method of claim 15, further comprising the steps of:

installing another seabed transponder along the pipelay route;

installing a second pipe transponder on said pipeline near said first pipe transponder; and

interrogating said other seabed transponder and said second pipe transponder so as to determine the respective distance between them so as to further establish the remaining length of pipeline needed to reach the second position.